



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.                    | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------------|-------------|----------------------|---------------------|------------------|
| 09/601,222                         | 09/14/2000  | Charles Coulier      | 032326-080          | 8563             |
| 21839                              | 7590        | 03/14/2005           | EXAMINER            |                  |
| BURNS DOANE SWECKER & MATHIS L L P |             |                      | ZAND, KAMBIZ        |                  |
| POST OFFICE BOX 1404               |             |                      | ART UNIT            |                  |
| ALEXANDRIA, VA 22313-1404          |             |                      | PAPER NUMBER        |                  |

2132

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/601,222

Applicant(s)

COULIER ET AL.

Examiner

Kambiz Zand

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this section can be found in the prior office action.
2. The prior office actions are incorporated herein by reference. In particular, the observations with respect to claim language, and response to previously presented arguments.
3. Claims 1-7 have been amended.
4. Claims 1-7 are pending.
5. Examiner withdraws objection to the drawings and specification due to correction by the applicant.

### ***Response to Arguments***

6. Applicant's arguments with respect to the claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.
  - In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. "allocation is carried out in a dynamic manner", page 8, last paragraph of Applicant's response ) are not recited in the rejected **claim 1**. Although the claims are interpreted in light of the specification, limitations from the

specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### ***Claim Objections***

7. **Claims 2-7** are objected to because of the following informalities: typo error.

Examiner suggests the following corrections:

#### **Claim 2:**

- Replacement of the phrase "an" (line 5) with the phrase "said".
- Inserting the phrase "security" after the phrase "said" line 6.
- Replacement of the phrase "a" (line 7) with the phrase "the".
- Replacement of the phrase "a" (line 8) with the phrase "said".
- Deletion of the phrase "the" (line 7).
- Deletion of the phrase "the" (line 9, first occurrence).

#### **Claim 3:**

- Deletion of the phrase "the" (line 10, second occurrence).

#### **Claim 4:**

- Replacement of the phrase "a" (line 3, first occurrence) with the phrase "said".

Art Unit: 2132

Examiner suggests Applicant to carefully check on the claims 5-7 language in order to correct possible typo errors such as above errors.

***Claim Rejections - 35 USC § 112***

8. **Claims 1 and 3** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the phrase “allocatable..” phrase (line 7) makes the claims indefinite and unclear in that neither means/method steps nor interrelationship of means/method steps are set forth in these claims in order to achieve the desired results expressed in the “allocatable...” phrase.

It is not clear “allocatable” is an affirmative statement with respect to claim 1 or not, that is the method steps are being executed (narrow claim language) or not (broader claim language).

Examiner suggests the following phrase “selectively allocating a number of security registers to any one of a plurality of said directories”. Appropriate corrections or clarification are requested.

Examiner considers the broader claim language for the purpose of the examination, that is the claim 1 does represent only directories in which the data

applications are stored, they are organized in an n-level tree, a number of security registers where each security registers containing rights or secrets.

**In claim 3** the phrase "a new directory" lines 10 and 11 are confusing. It is not clear if the phrase refers back to selected new directory of lines 9-10 or it is another new directory. Examiner considers it as referring back to selected new directory. Clarification or correction is requested.

***Claim Rejections - 35 USC § 103***

9. **Claim 1** is rejected under 35 U.S.C. 103(a) as being unpatentable over Proust et al. (6,216,014 B1) in view of Jennings, III (6,134,631 A).

**As per claim 1** Proust et al. (6,216,014 B1) teach a system of managing the security of data processing applications (see col.3, lines 37-40 where a system of managing of applications by secure means is disclosed), comprising:

Directory in which the data processing applications are stored (see col.12, lines 46-67 where directory files such as master file or root directory and sub-directories stores application files such as loyalty application, payment applications), said directories being organized in an n-level tree (see col.12, lines 46-52 where the directories are structured as three level hierarchical structure, that is corresponds to Applicant's n-level tree structure as a hierarchical structure); and

Art Unit: 2132

A number of security registers, which are selectively allocatable to any one of a plurality of said directories, each security register containing all rights or secrets which have been granted under the directory to which it has been allocated (see col.13, lines 36-55 which relates to fig.5 flowchart, step 57 disclose having reference secret and a message authentication mode which relate to the related file and under a directory as disclosed above in col.12, lines 46-67; therefore rights that corresponds to message authentication mode that verify the access control policy to be used for the related file which itself relates to transmitted remote application; and on the other hand secrets such as reference secret related to corresponding file that itself relates to remote application; further col.14, lines 6-9 and 28-47 disclose data storage holds a secret reference, a security scheme and authentication mode and their storage in the data storage and how the pointer points to the location of the storage; examiner considers location of the storage where the identifier points to as corresponding to the security register that holds the message that contains reference secret or rights) but do not disclose that security registers or particular location of the memory that corresponds to a security registers is allocated to and it is under a directory. However Jennings, III (6,134,631 A) teach an slave device that being treated as a hierarchical memory system that security registers or particular location of the memory that corresponds to a security registers is allocated to and it is under a directory (see col. 3, lines 29-33 where it disclose memory systems is hierarchical able to retrieve files within a stored directory). It would have been

obvious to one of ordinary skilled in the art at the time the invention was made to utilize Jennings, III (6,134,631 A) allocation of security register or a memory location under a single directory in Proust et al. (6,216,014 B1)'s hierarchical file management security system of processing applications in order to provide additional performance for demanding applications while adding little additional hardware by utilizing the slave device as hierarchical memory system on which to retrieve and store files that are stored under a directory.

10. **Claims 2 and 4** are rejected under 35 U.S.C. 103(a) as being unpatentable over Proust et al. (6,216,014 B1) in view of Jennings, III (6,134,631 A), and further in view of Shanton (5, 680,452 A).

**As per claim 2** Proust et al. (6,216,014 B1) teach a method of managing the security of data processing applications, comprising the steps of:

selecting one of a plurality of directories that are organized in an n-level hierarchy (see col.12, lines 46-52 where the directories are structured as three level hierarchical structure, that is corresponds to Applicant's n-level tree structure as a hierarchical structure);

storing in an allocated security register rights granted under the directory to which said register has been allocated, according to given rules (see col.13, lines 36-55 which relates to fig.5 flowchart, step 57 disclose having reference secret



Art Unit: 2132

and a message authentication mode which relate to the related file and under a directory as disclosed above in col.12, lines 46-67; therefore rights that corresponds to message authentication mode that verify the access control policy to be used for the related file which itself relates to transmitted remote application are corresponding to given rules; and on the other hand secrets such as reference secret related to corresponding file that itself relates to remote application; further col.14, lines 6-9 and 28-47 disclose data storage holds a secret reference, a security scheme (given rule) and authentication mode (authentication rule) and their storage in the data storage and how the pointer points to the location of the storage; examiner considers location of the storage where the identifier points to as corresponding to the security register that holds the message that contains reference secret or rights).

seeking the secrets presented in a directory in which a data processing applications is stored (see col.12, lines 46-52 where the directories are structured as three level hierarchical structure, that is corresponds to Applicant's n-level tree structure as a hierarchical structure where examiner considers the root directory or master file directory represent the highest level directory or level 1 directory as a root directory where other subdirectories are under such directory; and see col.12, lines 46-67 where directory files such as master file or root directory and sub-directories stores application files such as loyalty application, payment applications); and

(c) verifying the knowledge of one or more rights at the level of the data processing application (see fig.6-9 where knowledge of one or more rights such as security scheme of application or security attributes or secret reference or authorization mode is verified in relation with one another; col.12, lines 58-61 where a right of access to Loyalty remote applications is verified by verifying access condition "private") **but do not disclose explicitly** that security registers or particular location of the memory that corresponds to a security registers is allocated to and it is under a directory.

However Jennings, III (6,134,631 A) teach an slave device that being treated as a hierarchical memory system that security registers or particular location of the memory that corresponds to a security registers is allocated to and it is under a single directory (see col. 3, lines 29-33 where it disclose memory systems is hierarchical able to retrieve files within a stored directory and therefore any retrieval of files from any location that corresponds to security register in the memory is under a directory). It would have been obvious to one of ordinary skilled in the art at the time the invention was made to utilize Jennings, III (6,134,631 A) allocation of security register or a memory location under a single directory in Proust et al. (6,216,014 B1)'s hierarchical file management security system of processing applications in order to provide additional performance for demanding applications while adding little additional hardware by utilizing the

slave device as hierarchical memory system on which to retrieve and store files that are stored under a directory.

Proust et al. (6,216,014 B1) in view of Jennings, III (6,134,631 A) however do not explicitly disclose dynamic allocation with respect to directories and their corresponding registers. On the other hand Shanton (5, 680,452 A) disclose analogous art having hierarchy access system for the user of the system (see col.3, lines 62-65), where objects can be dynamic (see col.4, lines 38-41) where such objects can be container files, a directory, a collection of directories, a hard disk (see col.4, lines 43-52) and where such objects such as directories and file container that corresponds to Applicant's registers have inherent features that can change dynamically "on the fly" during the operation on the object (see col.4, lines 34-39); and selection is being done on the dynamic objects (see col.6, lines 7-40 where such dynamic inherency of the objects create a memory saving during the selection and operation of the object in harmony with Applicant's invention goal). Therefore it would have been obvious to one of ordinary skilled in the art at the time the invention was made to utilize Shanton's dynamic selection of registers such as file container in Proust's hierarchical file management security system in view of Jennings, III (6,134,631 A) allocation of security register or a memory location under a single directory in order to provide a system in which objects may be embedded within other objects, resulting in an access hierarchy for users of the system (col.3, lines 62-65).

**As per claim 4** Proust et al. (6,216,014 B1) teach a method according to claim 2 wherein said seeking step is performed according to the following rule: verifying that the secret presented is known in the current directory (Ni) or in a directory at a higher level of the hierarchy (see col.8, lines 1-24 where upon authentication of access value such as "private access" or "shared access" that corresponds to verification of a secret presented in a master file or file under master file where the master file corresponds to root directory and files under it corresponds to sub-directories access is permitted and therefore upon authentication secret known in a subdirectory or files under the master files that corresponds to directory Ni or its higher directory that corresponds to master file which itself corresponds to higher directory is verified).

***Allowable Subject Matter***

11. **Claims 3** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
12. **Claims 5-7** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### Conclusion

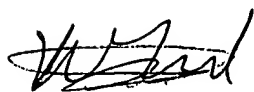
13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kambiz Zand whose telephone number is (571) 272-3811. The examiner can normally be reached on Monday-Thursday (8:00-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3799. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status

Art Unit: 2132

information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Kambiz Zand', with a stylized, cursive script.

Kambiz Zand

03/04/2005